



### 16<sup>th</sup> NREL Industry Growth Forum November 17-19, 2003



Paul Hudson, Commissioner of  
the Texas Public Utility

The 16th NREL Industry Growth Forum was held November 17-19 in Austin, Texas. This year's event united 34 competitively selected emerging clean energy technology companies from across the country with our nation's leading clean energy investors. The forum provided attendees with three days of networking and company "business case" presentations to promote and enhance the success of new ventures, emerging businesses, and the growth of entrepreneurship in the clean energy sector.

This forum was the largest to date with over 325 people registered, including venture capitalists, angel investors, commercial and investment bankers, private lenders, along with representatives of the nation's largest and most innovative energy companies. The event also featured addresses from Sam Baldwin, DOE Office of Energy Efficiency and Renewable Energy Chief Technology Officer and Board of Directors member, Hank Habicht, CEO of the Global Environment and Technology Foundation, and Peter Schwartz, Global Business Network Chairman and Co-founder. Founding sponsors for the forum were NREL, the U.S. Department of Energy, Clean Energy Incubator (which is part of the Austin Technology Incubator), the Texas State Energy Conservation Office, and the National Alliance of Clean Energy Business Incubators. A full list of all the many generous other sponsors can be found on [www.cleanenergyforum.com](http://www.cleanenergyforum.com).

The forum also included a tour of Austin-area clean energy landmarks, and a timely discussion of project financing Issues faced by entrepreneurs.

#### **Rich Educational Format**

NREL's Industry Growth Forums are the largest national venture event focused exclusively on entrepreneurial companies developing clean energy products to serve the hydrogen, energy and transportation infrastructure. The rich educational format – an NREL signature feature - allows clean energy business leaders to present and receive feedback on summary business plans before a panel of investment executives – all with a business interest in clean energy technology. Presenters were also mentored in their preparation for the Forum by a select group of investors and incubator executives from the National Alliance of Clean Energy Business Incubators. The Forum establishes a

Win-Win relationship between clean energy business leaders, the financial community, and ultimately the clean energy industry as a whole by stimulating business development.

### **2003 Business Case Presenters**

Companies showcased at this event included many of the most promising from the clean and renewable energy industry. From more than 100 entries, 34 companies were selected to present their business plan to industry investment leaders, and represent emerging, innovative companies in the clean energy industry. The criteria used by the selection committee, consisting of investors, included strength of the business model, potential return on investment and market need. A full list of the presenting companies selected as leaders in the clean energy industry by a committee of forum panelists are provided in the adjacent table.



Forum panelists are comprised of our nation's leading clean energy investors.

The panelists included those from leading investment firms such as Advent International, Altira Group, ChevronTexaco Ventures, Chrysalix, ConocoPhillips, Draper Fisher Jurvetson, Hunt Power, Nth Power, Pinto Technologies, Rockport, and Triton Ventures. Besides these distinguished panels many other investors and sponsors such as Vinson & Elkins were in the audience.

### **The 2003 Venture Competition Winners**

Bechtel Corporation's Julie Brokaw, Senior Technology Specialist spearheaded the development of the Venture Presentation Competition, including the monetary prize. The competition entitled the National Clean Energy Venture Competition was created to promote and support the creation of world-class businesses, and brings more clean energy technology options into the mainstream energy market. Last year's winner

#### Business Case Presenters

*Advent Solar, Inc.*  
*AFS Trinity Power Corporation*  
*Afuels Technology, LLC*  
*Ascent Power Systems, Inc.*  
*Avalence LLC*  
*Clean Energy Systems, Inc.*  
*Community Power Corporation*  
*Energy Materials Research*  
*GenCell Corporation*  
*HelioVolt Corporation*  
*H2 Storage Solutions, Inc.*  
*H2/Onsite*  
*Independent Energy Corporation*  
*International Solar Electric Technology, Inc.*  
*ISE Corporation*  
*Lynntech Solutions*  
*MesoFuel, Inc.*  
*MicroPlanet, Ltd.*  
*Pentadyne Power Corporation*  
*Power Tube, Inc.*  
*PRISM Strategies, Inc.*  
*PureVision Technology, Inc.*  
*Rentricity, Inc.*  
*Sacred Power Corporation*  
*SAGE Electrochromics, Inc.*  
*Spectrolab, Inc.*  
*SRT Group, Inc.*  
*Stirling Technology Company*  
*Surfact Technologies, Inc.*  
*The Solaria Corporation*  
*ThermoChem Recovery International, Inc.*  
*Verdant Power*  
*Weather Miser, Inc.*  
*WindKraft, Inc.*

Konarka Technologies, Inc. ([www.konarkatech.com](http://www.konarkatech.com)), represented by Bill Beckenbaugh, CEO gave us an update on their continued progress and success since last year. Konarka develops and commercializes novel polymer based photovoltaic products that convert sunlight and indoor light into electricity.



Julie Brokaw, Richard Amato, and Lawrence Murphy present Rusty Schmitt of Advent Solar with the top prize valued at more than \$10,000.

Bechtel representative, Julie Brokaw, presented the award for this year's competition to Advent Solar. Advent Solar was selected from the presenting companies, and received a prize valued at more than \$10,000, which includes a one-year membership to the Clean Energy Incubator and a \$7,000 cash award from Bechtel Group. Advent Solar ([www.adventsolar.com](http://www.adventsolar.com)) makes advanced low-cost photovoltaic cells using their emitter-wrap-through cell technology.

Two other companies were given Outstanding Presentations awards, each valued at \$1500. One award went to Power Tube Inc. ([www.powertubeinc.com](http://www.powertubeinc.com)) a developer of clean energy geothermal power plants based in Austin TX. The second award went to ISE ([www.isecorp.com](http://www.isecorp.com)), a leading supplier of hybrid-electric and fuel cell drive systems for heavy-duty vehicles such as buses and trucks, that is base in based in San Diego, CA.

Both Advent Solar and ISE Corporation have technologies with strong ties to the U.S. Department of Energy technology development efforts.

### Key Note and Special Presentations

Peter Schwartz, Co-founder and Chairman of the futurist think-tank and the investment firm, Global Business Network, delivered the keynote address, which outlined his five-point plan to build a hydrogen-based economy, with emphasis on the role of innovation and entrepreneurship. In the discussion, Schwartz conveyed his thoughts on how hydrogen can become the clean, abundant fuel of choice for America's future.

A special session on project financing led by project financing experts from the public and private sectors, explored today's evolving project financing landscape, the changing risk structure, and possible strategies for success. This session was timely because of the current difficulty energy projects are face when raising project financing – especially obtaining the debt portion, at reasonable terms. The project financing discussed was relevant to early, 1st or 2<sup>nd</sup> stage production plants/facilities (e.g. a PV plant), and not R&D or demonstration/verification projects. A number of financial failures of merchant power plants, using conventional technology, as well as the generally difficult economic environment, has led to a highly risk averse financing environment. When these risks are compounded with the additional technical risks associated with early production facilities that employ newer technology, much higher costs will be incurred.

**Thanks to our Generous Sponsors**

NREL appreciates the generous support of forum co-sponsors, including the U.S. Department of Energy, Texas State Energy and Conservation Office, the National Alliance of Clean Energy Business Incubators, the California Energy Commission, Bechtel, Austin Clean Energy Initiative, the Global Business Network, Austin Energy, British Consulate- General, Chevron Texaco, Cinergy Ventures, Nth Power, Vinson and Elkins, Advent International, Milbank, Pinnacle West Capital Corp, Green Mountain Energy, Altira, Arizona Public Service, Clean Edge, Tate Austin, and the American Council on Renewable Energy and finally NREL's managing partners the Midwest Research Institute, Battelle, and Bechtel.

Applications to present at the 17th NREL Industry Growth Forum will be accepted beginning in the Spring 2004. Look for more information about the next Forum as it becomes available at :

<http://www.nrel.gov/technologytransfer/entrepreneurs/entrepreneurs.html>